

WHAT IS CLAIMED IS:

1. An apparatus for controlling a driving voltage of sense amplifiers for a memory device, the apparatus
5 comprising:

a reference voltage generator for generating a reference voltage;

a core voltage generator for generating a core voltage to be used for the driving voltage of the sense amplifier;

10 a comparator for comparing the core voltage generated by the core voltage generator with the reference voltage generated by the reference voltage generator; and

a clamp for adjusting a level of the core voltage generated by the core voltage generator based on an output
15 signal of the comparator.

2. The apparatus according to claim 1, wherein the comparator drives the clamp to discharge a charge of the core voltage to a ground line when the core voltage is greater
20 than the reference voltage, and the comparator controls the clamp to be maintained in a non-drive state when the core voltage is less than the reference voltage.

3. The circuit according to claim 1, wherein the core

voltage generated by the core voltage generator includes a sense enable bar signal which is an inverted signal of an enable signal, and the enable signal is a signal which enables a sensing operation of the sense amplifier.

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4. The apparatus according to claim 3, wherein the core voltage generator includes:

a core voltage driver driven by the sense enable bar signal; and

10 a switch being driven by an output signal of the core voltage driver, wherein,

when the switch is turned on, an external power voltage supplied to the memory device is used to generate the core voltage of the sense amplifier.

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